

REMARKS**INTRODUCTION:**

In accordance with the foregoing, the claims have been retained in their present form. No new matter is being presented, and approval and entry are respectfully requested.

Claims 1-18 are pending and under consideration. Claims 1-7 have been allowed. Reconsideration is respectfully requested of claims 8-18.

REJECTION UNDER 35 U.S.C. §251:

In the Office Action at pages 2-3, the Examiner rejects claims 8-18 under U.S.C. § 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based. This rejection is traversed and reconsideration is requested.

As a general matter, a broadening reissue requires that the scope of the newly presented claims be broader than the scope of the original patent claims. Further, a newly presented claim in a reissue may still be deemed broader than the original patent claim where the newly presented claim is narrower in some aspects, but broader in others. As noted by MPEP 1412.03, the test for whether a newly added claim is broader than the original patent claims is whether the "newly added claim in the reissue contains within its scope any conceivable apparatus or process which would not have infringed the patent, then that reissue claim would be broader than the patent claims."

Claim 1 of USPN 5,868,123 is the only independent claim of the patent. A Table I comparison of independent claim 1 of USPN 5,868,123 (henceforth, the '123 patent) and independent claim 8 of the Reissue Application recites:

Table I

Independent Claim 1 of USPN 5,868,123	Independent Claim 8 of the Reissue Application
(1) A magnetic core-coil assembly for generating an ignition event in a spark ignition internal combustion system having at least one combustion chamber, comprising	(7) A magnetic core-coil assembly for generating an ignition event in a spark ignition internal combustion system having at least one combustion chamber, comprising
(2) a magnetic core that is iron based and further comprises metallic elements including nickel and cobalt, glass forming elements including boron and carbon, and semi-metallic elements, including silicon,	
(3) said core being fabricated by <u>heat treating</u> an amorphous magnetic alloy and	
(4) having a primary coil for low voltage excitation and a secondary coil for a high voltage output to be fed to a spark plug,	(8) a magnetic core having a primary coil for low voltage excitation and a secondary coil for a high voltage output to be fed to a spark plug
	(9) the core comprising amorphous <u>metal</u> ,
	(10) being non-gapped, and
	(11) having a permeability ranging from about 100 to 300
(5) said core-coil assembly having the capability of (i) generating a high voltage in the secondary coil within a short period of time following excitation thereof, and	(12) said core-coil assembly having the capability of (i) generating a high voltage in the secondary coil within a short period of time following excitation thereof, and
(6) (ii) sensing spark ignition conditions in the combustion chamber to control the ignition event.	(13) (ii) sensing spark ignition conditions in the combustion chamber to control the ignition event.

In Table I, for ease in discussion, elements of independent claim 1 of USPN 5,868,123 are numbered (1)-(6), and elements of independent claim 8 of the Reissue Application are numbered (7)-(13). It is clear that claim 8 of the Reissue Application is narrower with respect to elements (10)-(11), which are not recited in claim 1 of USPN 5,868,123. Further, claim 8 of the Reissue Application is broader with respect to element (2), which is recited in claim 1 of USPN 5,868,123, but not in claim 8 of the Reissue Application (Element (3) recites heat-treating of an amorphous magnetic alloy, and element (9) recites an amorphous metal, which is broader). The underlining in Table I indicates differences in element (3) and element (9). That is, element (3) recites "an amorphous metallic alloy," and element (9) recites "an amorphous metal"; in addition, element (3) is heat-treated, and element (9) is not heat-treated.

Hence, a magnetic core-coil assembly in accordance with independent claim 8 of the Reissue Application may be implemented which would not likely infringe claim 1 or the remaining patent claims of USPN 5,868,123. Thus, it appears that independent claim 8 of the Reissue Application meets the standard outlined in MPEP 1412.03 since devices that would infringe the

newly presented claims would not otherwise appear to infringe the '123 patent claims.

Claim 1 of USPN 5,868,123 is the only independent claim of the patent. A Table II comparison of independent claim 1 of USPN 5,868,123 and independent claim 13 of the Reissue Application recites:

Table II

Independent Claim 1 of USPN 5,868,123	Independent Claim 13 of the Reissue Application
(1) A magnetic core-coil assembly for generating an ignition event in a spark ignition internal combustion system having at least one combustion chamber, comprising	(14) A magnetic core-coil assembly for generating an ignition event in a spark ignition internal combustion system having at least one combustion chamber, comprising
(2) a magnetic core that is iron based and further comprises metallic elements including nickel and cobalt, glass forming elements including boron and carbon, and semi-metallic elements, including silicon,	
(3) said core being fabricated by heat treating an amorphous <u>magnetic alloy</u> and	
(4) having a primary coil for low voltage excitation and a secondary coil for a high voltage output to be fed to a spark plug,	(15) a magnetic core having a primary coil for low voltage excitation and a secondary coil for a high voltage output to be fed to a spark plug
	(16) the core comprising <u>iron-based</u> amorphous <u>metal</u> heat-treated
	(17) to have a permeability ranging from about 100 to 300,
(5) said core-coil assembly having the capability of (i) generating a high voltage in the secondary coil within a short period of time following excitation thereof, and	(18) said core-coil assembly having the capability of (i) generating a high voltage in the secondary coil within a short period of time following excitation thereof, and
(6) (ii) sensing spark ignition conditions in the combustion chamber to control the ignition event.	(19) (ii) sensing spark ignition conditions in the combustion chamber to control the ignition event.

In Table II, for ease in discussion, elements of independent claim 1 of USPN 5,868,123 are numbered (1)-(6), and elements of independent claim 13 of the Reissue Application are numbered (14)-(19). It is clear that claim 13 of the Reissue Application is narrower with respect to element (17), which is not recited in claim 1 of USPN 5,868,123. Further, claim 13 of the Reissue Application is broader with respect to element (2), which is recited in claim 1 of USPN 5,868,123, but not in claim 13 of the Reissue Application (Element (3) recites heat-treating of an amorphous magnetic alloy, and element (16) recites an iron-based amorphous metal heat-treated). The underlining in Table II indicates differences in element (3) and element (16). That is, element (3) recites "an amorphous magnetic alloy," and element (16) recites an iron-based

amorphous metal."

Hence, a magnetic core-coil assembly in accordance with independent claim 13 of the Reissue Application may be implemented which would not likely infringe claim 1 or the remaining patent claims of USPN 5,868,123. Thus, it appears that independent claim 13 of the Reissue Application meets the standard outlined in MPEP 1412.03 since devices that would infringe the newly presented claims would not otherwise appear to infringe the '123 patent claims.

Claim 1 of USPN 5,868,123 is the only independent claim of the patent. A Table III comparison of independent claim 1 of USPN 5,868,123 and independent claim 15 of the Reissue Application recites:

Table III

Independent Claim 1 of USPN 5,868,123	Independent Claim 8 of the Reissue Application
(1) A magnetic core-coil assembly for generating an ignition event in a spark ignition internal combustion system having at least one combustion chamber, comprising	(20) A magnetic core-coil assembly for generating an ignition event in a spark ignition internal combustion system having at least one combustion chamber, comprising
(2) a magnetic core that is iron based and further comprises metallic elements including nickel and cobalt, glass forming elements including boron and carbon, and semi-metallic elements, including silicon,	
(3) said core being fabricated by <u>heat treating</u> an amorphous <u>magnetic</u> alloy and	
(4) having a primary coil for low voltage excitation and a secondary coil for a high voltage output to be fed to a spark plug,	(21) a magnetic core having a primary coil for low voltage excitation and a secondary coil for a high voltage output to be fed to a spark plug,
	(22) the core comprising <u>iron-based</u> amorphous <u>metal</u> and
	(23) being non-gapped, and
(5) said core-coil assembly having the capability of (i) generating a high voltage in the secondary coil within a short period of time following excitation thereof, and	(24) said core-coil assembly having the capability of (i) generating a high voltage in the secondary coil within a short period of time following excitation thereof, and
(6) (ii) sensing spark ignition conditions in the combustion chamber to control the ignition event.	(25) (ii) sensing spark ignition conditions in the combustion chamber to control the ignition event.

For ease in discussion, elements of independent claim 1 of USPN 5,868,123 are numbered (1)-(6), and elements of independent claim 15 of the Reissue Application are numbered (20)-(25). It is clear that claim 15 of the Reissue Application is narrower with respect to element (23), which is not recited in claim 1 of USPN 5,868,123. Further, claim 15 of the

Reissue Application is broader with respect to element (2), which is recited in claim 1 of USPN 5,868,123, but not in claim 15 of the Reissue Application (element (3) recites heat-treating of an amorphous magnetic alloy, and element (22) recites the core comprising iron-based amorphous metal). The underlining in Table III indicates differences in element (3) and element (22). That is, element (3) recites "an amorphous metal alloy," and element (22) recites an iron-based amorphous metal"; in addition, element (3) is heat-treated, and element (22) is not heat-treated.

Hence, a magnetic core-coil assembly in accordance with independent claim 15 of the Reissue Application may be implemented which would not likely infringe claim 1 or the remaining patent claims of USPN 5,868,123. Thus, it appears that independent claim 15 of the Reissue Application meets the standard outlined in MPEP 1412.03 since devices that would infringe the newly presented claims would not otherwise appear to infringe the '123 patent claims.

Claim 1 of USPN 5,868,123 is the only independent claim of the patent. A Table IV comparison of independent claim 1 of USPN 5,868,123 and independent claim 17 of the Reissue Application recites:

Table IV

Independent Claim 1 of USPN 5,868,123	Independent Claim 17 of the Reissue Application
(1) A magnetic core-coil assembly for generating an ignition event in a spark ignition internal combustion system having at least one combustion chamber, comprising	(26) A magnetic core-coil assembly for generating an ignition event in a spark ignition internal combustion system having at least one combustion chamber, comprising
(2) a magnetic core that is iron based and further comprises metallic elements including nickel and cobalt, glass forming elements including boron and carbon, and semi-metallic elements, including silicon,	
(3) said core being fabricated by <u>heat treating</u> an amorphous magnetic alloy and	
(4) having a primary coil for low voltage excitation and a secondary coil for a high voltage output to be fed to a spark plug,	(27) a magnetic core having a primary coil for low voltage excitation and a secondary coil for a high voltage output to be fed to a spark plug
	(28) the core comprising iron-based amorphous metal, and
	(29) having a permeability ranging from about 100 to 300
(5) said core-coil assembly having the capability of (i) generating a high voltage in the secondary coil within a short period of time following excitation thereof, and	(30) said core-coil assembly having the capability of (i) generating a high voltage in the secondary coil within a short period of time following excitation thereof, and
(6) (ii) sensing spark ignition conditions in the combustion chamber to control the ignition event.	(31) (ii) sensing spark ignition conditions in the combustion chamber to control the ignition event.

For ease in discussion, elements of independent claim 1 of USPN 5,868,123 are numbered (1)-(6), and elements of independent claim 17 of the Reissue Application are numbered (26)-(31). It is clear that claim 17 of the Reissue Application is narrower with respect to element (29), which is not recited in claim 1 of USPN 5,868,123. Further, claim 17 of the Reissue Application is broader with respect to element (2), which is recited in claim 1 of USPN 5,868,123, but not in claim 17 of the Reissue Application (element (3) recites heat-treating of an amorphous magnetic alloy, and element (28) recites the core comprising iron-based amorphous metal). The underlining in Table IV indicates differences in element (3) and element (28). That is, element (3) recites "an amorphous metal alloy," and element (28) recites an iron-based amorphous metal"; in addition, element (3) is heat-treated, and element (28) is not heat-treated.

Hence, a magnetic core-coil assembly in accordance with independent claim 17 of the Reissue Application may be implemented which would not likely infringe claim 1 or the remaining patent claims of USPN 5,868,123. Thus, it appears that independent claim 17 of the Reissue Application meets the standard outlined in MPEP 1412.03 since devices that would infringe the newly presented claims would not otherwise appear to infringe the '123 patent claims.

It is respectfully submitted that nothing in the original patent specification indicates an intent not to claim the subject matter of the claims presented in the Reissue Application, and that the newly presented claims are directed to an entirely distinct invention with respect to the invention of the '123 patent.

Ball Corporation v. United States, 221 USPQ 296 (1984) recites:

In *In re Wadlinger*, the CCPA faced a situation in which the reissue claims were, as the trial judge found here, of 'different' scope from the cancelled claims. While both the reissue and canceled claims were directed to the same process in *Wadlinger*, the canceled claims were considered broader, resulting in claims of different scope. The reissue claims were held valid. Similarly, we find that the non-material broader aspects of Ball's reissue claims do not deprive them of their fundamental narrowness of scope relative to the canceled claims. Thus, the reissue claims are sufficiently narrower than the canceled claims to avoid the effect of the recapture rule. *In re Wadlinger*, 496 F.2d at 1205-06, 181 USPQ at 830-31 (CCPA 1974).

Hence, it is respectfully submitted that the broader scope of claim subject matter surrendered in the application for the patent is not recaptured by the filing of the present Reissue Application because the claims of the Reissue Application are narrower in scope in certain material patentable aspects relative to the claimed subject matter and broader in scope in certain material aspects relative to the claimed subject matter of the patent. Thus, claims 8-18 in the present Reissue Application are respectfully submitted not to recapture the broader scope of claimed subject matter surrendered in the application for the patent.

With respect to the second test set forth in MPEP 1412.02(C. The Third Step), it is respectfully submitted that the reissue claims do not entirely omit limitations that were added

during original prosecution to overcome an art rejection. More specifically, it may be helpful to again summarize the prosecution in the '123 patent:

The prosecution history of the '123 patent included an Office Action dated March 31, 1997 wherein original claims 5 and 8 were objected to as depending from rejected claims, but would have been allowable if written in independent form. Original claim 5 depended from original claim 1, which, in turn depended from original claim 1.

Subsequent to the Office Action, a telephonic interview was conducted on June 18, 1997 during which Examiner Argenbright and applicants' attorney of record, Mr. Buff, agreed on a proposed amendment in which original claim 1 was modified to incorporate therein the limitations of original claim 5. The changes were entered by way of an Examiner's Amendment, after which the case was allowed. An amendment after allowance was filed on August 19, 1997, so as to comply with the Examiner's requirement by providing a formal drawing depicting FIGs. 4a and 4b and amending the specification to reference the subject matter incorporated in the newly submitted drawing.

Significantly, the Examiner Interview Summary Record of the telephonic interview conducted June 18, 1997 indicates that no prior art references were discussed. The Examiner's Record states: "Changes to claims set forth on the attached Examiner's Amendment places application in condition for allowance." Moreover, the Notice of Allowability dated June 23, 1997, does not contain any Reasons for Allowance. It is thus respectfully submitted that the subject matter of original claim 5 was never amended or restricted to overcome prior art to obtain its allowance, the claim having been objected to, but indicated as being allowable if rewritten in independent form. As noted hereinabove, the text added by Examiner's Amendment to original claim 1 was literally present in claims 5 and 2 (on which claim 5 originally depended) as originally filed.

The Examiner has acknowledged that applicants made no argument on the record that any limitation added to the originally filed claims was made for the purpose of overcoming prior art. Applicants thus submit that while present independent claim 8 is broader in certain respects than issued claim 1, the broadening is not germane to any prior art rejection of the subject matter of original claim 5, there having been no such rejection, so that the recapture rule does not operate to bar any broadening in present independent claim 8. That is to say, the broadening of presently pending claim 8 is not the recapture of material surrendered for the purpose of patentability, nor was its surrender ever required as a predicate for patentability. Absent evidence of narrowing, it is submitted that reissue is proper. In re Willingham, 282 F.2nd 353, 127 USPQ 211, 215 (CCPA 1960).

Similarly, the broadening of present independent claims 13, 15, and 17 is not germane to any prior art rejection of the subject matter of original claim 5

Significantly, the Federal Circuit has ruled that the rewriting of an allowable dependent claim in independent form and the cancellation of non-allowed claims during prosecution is not the type of amendment that triggers a prosecution history estoppel doctrine to limit the scope of equivalents. (emphasis added) Vermeer Mtg. Co. v. Charles Mach. Work, Inc., Civ. App. No. 00-1119, slip op at 4 (Fed. Cir. Nov. 27, 2000) (unpublished). Such is the case here. The Examiner's Amendment, which followed the telephonic interview of June 18, 1997 during the prosecution of the parent '123 patent, literally incorporated into original claim 1 the precise terminology of original claims 2 and 5.

Hence, Applicants respectfully maintain that the prosecution history of the '123 patent is thus devoid of any arguments or changes to the claims that evidence the surrender of subject matter sought in pending claims 8-18. Under In re Clement, 45 USPQ 2d 1164, such evidence is required for the recapture doctrine to bar a broadening reissue.

With respect to the Examiner's contention that MPEP 1412.02(C. The Third Step) (2)(a) states that "Reissue claims that are broader than the original patent claims by not including the surrender-generating-limitation will be barred by the recapture rule even though there is narrowing of the claims not related to the surrender-generating-limitation, the surrender-generating-limitation being that limitation added to obtain allowance of the original patent, the surrender-generating-limitation in this case, being the subject matter of original claims 2 and 5 that has been left out of the newly-present claims, it is respectfully submitted that there may be a misunderstanding of the amendment filed before allowance, i.e., that, since there was no evidence in the prosecution of the '123 patent that the amendment was in any sense an admission that the scope of claim 1 was not patentable, the recapture rule is not applicable.

The court's prior opinions indicate that, as a general proposition, in determining whether there is a surrender, the prosecution history of the original patent should be examined for evidence of an admission by the patent applicant regarding patentability. In re Clement, 131 F.3d at 1468, 45 USPQ2d at 1164 (noting that, with regard to claim amendments, the recapture rule does not apply in the absence of evidence that the amendment was an admission that the scope of the claim was not patentable); Mentor, 998 F.2d at 995, 27 USPQ2d at 1524 (same); Seattle Box Co. v. Industrial Crating & Packing, Inc., 731 F.2d 818, 826, 221 USPQ 568, 574 (Fed. Cir. 1984) (declining to apply the recapture rule when there was no evidence that the "amendment . . . was in any sense an admission that the scope of [the] claim was not patentable").

Hence, as noted above, it is respectfully submitted that the recapture rule does not apply because there is no evidence that the amendment was an admission that the scopes of claims 8-18 were not patentable.

Further, the court has held: "If reissue is sought where claims have not been previously canceled, analysis becomes more difficult. In that case relative claim scope is not available to illuminate the alleged error. We are not faced with that situation in this proceeding." Ball Corp. v. United States, 729 F.2d 1429, 1436 n.19, 221 USPQ 289, 295 n.19 (Fed. Cir. 1984). However, in the present case, claims 8-18 have not been previously canceled.

In addition, the recapture rule may be avoided in some circumstances, when the reissue claims are materially narrowed in other respects. Mentor, 998 F.2d at 996, 27 USPQ2d at 1525 ("Reissue claims that are broader in certain respects and narrower in others may avoid the effect of the recapture rule."); Clement, 131 F.3d at 1470, 45 USPQ2d at 1165. For example, in Ball the recapture rule was avoided because the reissue claims were sufficiently narrowed (described by the court as "fundamental narrowness") despite the broadened aspects of the claims. 729 F.2d at 1438, 221 USPQ at 296. In the context of a surrender, by way of argument, this principle, in appropriate cases, operates to overcome the recapture rule when the reissue claims are materially narrower in other overlooked aspects of the invention. The purpose of this exception to the recapture rule is to allow the patentee to obtain through reissue a scope of protection to which he is rightfully entitled for such overlooked aspects. In the present Reissue Application, the narrowing elements in claims 8-18 with respect to patent '123 are recited above (see also Tables I-IV above). It is respectfully submitted that the narrowing elements of the Reissue Application also independently overcome the recapture rule because the reissue claims are materially narrower in aspects of the invention.

Hence, the newly presented independent claims 8, 13, 15 and 17 in the Reissue Application are submitted to be allowable under, and compliant with, 35 U.S.C. § 251.

Since claims 9-12 depend from independent claim 8, claim 14 depends from independent claim 13, claim 16 depends from independent claim 15, and claim 18 depends from independent claim 17, respectively, claims 9-12, 14, 16, and 18 in the Reissue Application are submitted to be allowable under, and compliant with, 35 U.S.C. § 251, for at least the reasons that claims 8, 13, 15, and 17 in the Reissue Application are allowable under, and compliant with, 35 U.S.C. § 251.

ALLOWABLE SUBJECT MATTER:

Claims 1-7 are allowed.

CONCLUSION:

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot, and further, that all

pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

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By: Darleen Stockley
Darleen J. Stockley
Registration No. 34,257

1201 New York Avenue, N.W.
Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501